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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,465	07/24/2003	Damian G. Bonicatto	11838.0057-US-01	1276
23552	7590	12/02/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			LEE, BENJAMIN C	
			ART UNIT	PAPER NUMBER
			2632	

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/626,465

Applicant(s)

BONICATTO ET AL.

Examiner

Benjamin C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/25/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

Claim Rejections - 35 USC § 103

1. Amended claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van der Kaay et al. (US Pat. No. 6,393,126 B1) in view of Wachob et al. (US Pat. No. 5,334,975).

Van der Kaay et al. discloses a system for data communication with an endpoint transceiver (Figs. 2 and 4 showing bi-directional communication inherently including endpoint transceiver) located at customer premise (208), the system comprising: a time server (Trusted Master Clock (TMC) 204 in electrical communication with the transceiver according to Figs. 2 and 4 which show the application end providing bi-directional communication using the inherent transceiver) configured to retrieve the time (e.g., time from National Timing Authority (NTA)); a substation controller (Trusted Local Clock (TLC) 106) in communication with a communication medium and includes a substation transceiver (Figs. 2 and 4 also showing the Local Clock station 106 providing two way communication, and therefore, inherently a transceiver) and a substation programmable circuit (col. 9, lines 30-65) that includes a substation clock (e.g., timing engine), the substation programmable circuit programmed to periodically retrieve the time (col. 8, lines 25-28 and col. 15, lines 19-21) from the time server (MTC 204) to calibrate the substation clock to the retrieved time (col. 6, lines 50-52 and 57-63 and col. 7, lines 35-40); and to control the substation transceiver to transmit the time to the point transceiver (col. 9, lines 31-36).

Van der Kaay et al. differs from amended claim 1 by teaching communicating or distributing validated/calibrated time to remote devices but not disclosing that the distribution of the retrieved time is done via the claimed power distribution line as the communication medium. However, as taught by Wachob et al, global time reference can be communicated or distributed

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to residential household appliances via telephone line, wireless system, coaxial cable, fiber cable or power lines as alternatives (col. 3, lines 20-60) whereby a power line within a residence constitutes a power distribution line in that power is distributed to power-consuming devices throughout various locales in the residence via the line.

In view of the teachings by Van der Kaay et al. and Wachob et al., it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that various types of distribution system known in the art including power distribution line communication as taught by Wachob et al. can be used as alternatives in Van der Kaay et al. in order to distribute accurate global reference times to customer premises endpoint devices having endpoint transceivers.

2) Regarding claims 2 and 3, the system of Van der Kaay et al. is used for time adjustment (col. 8, lines 25-35). Fig. 4 shows many different local clock servers or hosts 106, therefore, they inherently can be located in different geographic regions so that adjustment to the correct time is in the context of the correct time zone.

3) Regarding claim 4, examiner takes Official notice that adjusting the time for daylight saving is well known in the art and would have been an obvious modification to the combination of Van de Kaay et al. and Wachob et al. in order to accurately adjust time due to different geographic regions and daylight savings practice.

4) Regarding claim 5, the time retrieved by the time server of Van der Knny et al. is Universal Time Coordinate UTC (col. 6, lines 12-14).

5) Regarding claim 6, Van der Kaay et al. further disclosed that the time can be retrieved from the global positioning system (col. 3, lines 44-46).

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6) Regarding claim 7, Van der Kaay et al. discloses that the time can be retrieved from an atomic clock (col. 4, lines 4-5), and as disclosed above, Wachob et al. teaches reference time can be transmitted via a wireless (radio) system.

7) Regarding claim 8, as disclosed by Van der Kaay et al, the upper clock is used for periodically calibrating and certifying the lower clock. Whether it does in every few second, minutes or hours is merely depending on the need of the accuracy of the application or device. Therefore, it would have been obvious to do it more frequently in order to have a more accurate time.

8) Regarding claim 9, as disclosed by Van der Kaay et al (col. 10, lines 5-43), the application 208 calibrates the clock to the retrieved time stamp and operates under programmable layers. Therefore, the endpoint is programmable in the manner claimed.

Response to Arguments

2. Applicant's arguments filed 8/29/05 have been fully considered but they are not persuasive.

1) The term "power distribution line" has been reasonably interpreted as including the residential power line that distributes power to various connected devices in the rejection, and the claim language has not distinguished it as Applicant argued. Secondly, residential power lines are inherently in electrical communication with power distribution line outside the residence. Furthermore, it is noted that since Wachob et al. provides the general teaching of using power line communication as an alternative communication medium of which to distribute the calibrated time to remote devices, and power line communication including communication through power distribution lines such as high-voltage, medium-voltage and/or low-voltage power

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lines outside of residential premises are also well known in the art (such as US 4396915 cited by Applicant), any amendment to specify that power distribution line is that outside of the residence power distribution network still would seem obvious as an intended use when the remote timer server is chosen to be located outside of the residence in which case remote communication through the power line would involve communicating through the power distribution line outside of the residence and to the receiving endpoint devices.

2) In conclusion, Applicant's arguments are not deemed persuasive, and the rejection is maintained.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) US 451,548

--Evidence that indoor power distribution network is also called "power distribution line" as by the use of the term "indoor power distribution line" in the Abstract.

2) US 5185591, 6154488, 4583090, 4602340, 5070537, 5251191, 6577231, 6686848, 6744351, 6834091, 6838978

--Various power line communication system and/or time calibration features.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Thu 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Benjamin C. Lee
Primary Examiner
Art Unit 2632

B.L.